



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/359,793	07/26/99	YAMADA	Y P7156-9038

MM02/1205
ARENT FOX KINTNER PLOTKIN & KAHN PLLC
1050 CONNECTICUT AVENUE, N.W., SUITE 60
WASHINGTON DC 20036-5339

EXAMINER	
FLETCHER, M	
ART UNIT	PAPER NUMBER

2837
DATE MAILED: 12/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/359,793

Applicant(s)
Yamada et al.

Examiner
Marlon Fletcher

Group Art Unit
2837



☒ Responsive to communication(s) filed on Aug 28, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-7 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-7 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2837

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruf (5,850,048) in view of Yamada et al. (5,614,687).

As recited in claims 1 and 7, Ruf discloses an audio signal processing apparatus capable of changing the tempo of an audio signal, said apparatus comprising: magnification designating means (133,134) capable of designating a plurality of different magnifications; means capable of automatically detecting a BPM or a beat period of the audio signal as discussed in column 2, lines 43-48, changing the BPM or the beat period in accordance with a magnification designated by the magnification designating means, changing the tempo of the audio signal in accordance with the changed BPM and the changed beat period as discussed in column 3, lines 1-16.

As recited in claim 2, Ruf discloses the audio signal processing apparatus, wherein manual designating means (130) is provided for designating any optional value serving as a BPM and a beat period.

Art Unit: 2837

As recited in claim 3, Ruf discloses the audio signal processing apparatus, wherein fine adjustment means is provided to effect a fine adjustment on a BPM and a beat period, as discussed in column 2, lines 43-48, wherein any direct adjustment can be made, and thereby effecting the same based on the direct adjustment.

As recited in claim 4, Ruf discloses the audio signal processing apparatus, wherein indicators (103) are provided to indicate a BPM and a beat period.

Ruf provides an audio signal input at initial activation of the apparatus, wherein an audio signal is produced as sound through speaker (258). Ruf does not disclose that the audio signal as an input into the apparatus.

However, as recited in claims 1 and 7, Yamada et al. disclose an apparatus which comprises audio input means for inputting an audio signal into the apparatus as seen in figure 1, wherein the apparatus detects beats per minute of the audio input signal via BPM detectors (101 to 103).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Yamada et al. with the apparatus of Ruf, because Ruf discloses magnification means, means for detecting beats per minute of an audio signal, and means for changing the beats per minute of the audio signal, wherein an audio signal is processed, and Yamada et al. enhances the apparatus of Ruf by allowing the audio signal to be input from an external source into the apparatus, wherein beats per minute are detected and processed.

Art Unit: 2837

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruf in view of Yamada et al. as applied to claims 1-4 above, and further in view of Rothbart (4,733,593).

Ruf and Yamada et al. are discussed above. Neither Ruf nor Yamada et al. disclose a mixer for mixing a changed tempo signal with the input audio signal.

However, as recited in claims 5 and 6, Rothbart discloses an audio signal processing apparatus, wherein a mixer is provided and wherein mixing ratio adjusting means adjusts a mixing ratio such that an audio signal generated by changing the tempo of the audio signal may be mixed with the input audio signal, thereby producing a newly formed audio signal as discussed in column 3, lines 18-21 and lines 27-32, and as discussed in column 6, line 33 through column 7, line 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Rothbart with the apparatus Ruf in view of Yamada et al., because Rothbart enhances the combination of Ruf and Yamada et al., by providing means for mixing signals to thereby produce a new signal.

Response to Arguments

4. Applicant's arguments filed 08/28/2000 have been fully considered but they are not persuasive.

Art Unit: 2837

The applicant argues that Ruf does not disclose audio input. It is agreed that the reference does not show an audio input being provided into the apparatus. However, an audio input signal is provided at the initial activation of the apparatus which is produced as sound through a speaker. The applicant further argues that Ruf does not disclose a means for automatically detecting BPMs. However, Ruf discloses the input of BPMs, which inherently means that there is a measure or detection of BPMs. Yamada et al. are further relied on to show an audio input signal into a means for detecting the BPMs for that input signal. Ruf provides selections for manually changing the BPMs or tempo which are directly related, wherein a change in BPMs provides a change in tempo. The applicant claims automatic BPM detection. The automatic change in BPM and tempo is not provided or claimed. Yamada et al. clearly provides means for automatically detecting BPMs, wherein Yamada et al. makes clear, what is inherent in Ruf. In combination, the limitations of claims 1 and 7 are met, as well as the dependent claims as rejected above.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2837


CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon Fletcher whose telephone number is (703) 308-0848.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi, can be reached on (703) 308-3370. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MTF


December 3, 2000


ROBERT E. NAPPI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800